

**In the Claims**

1.-53. (Cancelled)

54. (Currently Amended) A commercial kit ~~for impairing a cell~~ comprising:  
a vector containing an isolated nucleotide sequence encoding an amino acid sequence comprising residues 1-239 of SEQ ID NO: 2; and  
instructions for use.

55. (Canceled)

56. (Currently Amended) A commercial kit ~~for impairing a cell~~ comprising:  
a recombinant virus containing an isolated nucleotide sequence encoding a mutant *E. coli* purine nucleoside phosphorylase protein comprising residues 1-239 of SEQ ID NO: 2; and  
instructions for use.

57. (New) An isolated nucleotide sequence encoding a mutant *E. coli* purine nucleoside phosphorylase protein selected from the group consisting of: a mutant *E. coli* purine nucleoside phosphorylase protein having the amino acid sequence set forth in SEQ ID NO: 2 (M65V); isolated nucleotide sequence encoding a mutant *E. coli* purine nucleoside phosphorylase protein having the amino acid sequence set forth in SEQ ID NO: 4 (A157V); the mutant *E. coli* purine nucleoside phosphorylase protein having the amino acid sequence set forth in SEQ ID NO: 2 having a valine at position 65 and an alanine at position 157, wherein a methionine is substituted for the valine at position 65 and a leucine is substituted for the alanine at position 157 (A157L);



the mutant *E. coli* purine nucleoside phosphorylase protein having the amino acid sequence set forth in SEQ ID NO: 2 having a valine at position 65 and a glutamic acid at position 180, wherein a methionine is substituted for the valine at position 65 and an aspartic acid is substituted for the glutamic acid at position 180 (E180D); and the mutant *E. coli* purine nucleoside phosphorylase protein having the amino acid sequence set forth in SEQ ID NO: 2 having a valine at position 65, wherein an alanine is substituted for the valine at position 65 (M65A).

58. (New) A vector comprising the isolated nucleotide sequence of claim 57.

59. (New) An isolated host cell transformed with a vector comprising the isolated nucleotide sequence of claim 57.

60. (New) A recombinant virus which is capable of transferring a gene to a target cell and which comprises the isolated nucleotide sequence of claim 57.

61. (New) An isolated host cell transformed with the virus of claim 60.

62. (New) The isolated nucleotide sequence of claim 57 having the nucleotide sequence set forth in SEQ ID NO: 1.

63. (New) The isolated nucleotide sequence of claim 57 having the nucleotide sequence set forth in SEQ ID No: 3.